

## 15

an A/D converter for converting a reception signal into a digital reception signal;

a first memory for storing said digital reception signal for a period obtained by adding a time length of a pilot symbol series to a time length of a predetermined period;

a second memory for storing a spread code corresponding to a pilot symbol;

a correlator for obtaining a cross-correlation at each symbol by reading a reception signal and a spread code from said first memory and said second memory, respectively;

demodulating means for demodulating a correlation value output from said correlator conforming to a pilot symbol code;

coherent adder means for accumulation adding said demodulated correlation values over a plurality of pilot symbols and outputting a cross-correlation signal;

timing control means for controlling a reception timing so that a pilot symbol is contained in said reception signal stored in said first memory and controlling a timing for reading said first memory and said second memory;

an interpolation filter for re-sampling said cross-correlation signal at a frequency higher than a sampling frequency for said cross-correlation signal and outputting said re-sampled signal;

power calculation means for calculating power of said re-sampled cross-correlation;

averaging means for averaging said calculated power of cross-correlation signal over a plurality of cycles; and

peak detection means for detecting a peak of said averaged power of cross-correlation signal and determining a timing when said peak is detected as a reception timing.

**13.** A reception timing detection circuit of a CDMA receiver used for a mobile communication system using a direct spread code division multiple access method comprising:

an A/D converter for converting a reception signal into a digital reception signal;

a first memory for storing said digital reception signal for a period obtained by adding a time length of a pilot symbol series to a time length of a predetermined period;

spread means for spreading a pilot symbol with said spread means;

a second memory for storing a pilot symbol spread with said spread means;

## 16

a correlator for obtaining a cross-correlation by reading a reception signal and a spread pilot symbol from said first memory and said second memory, respectively and outputting a cross-correlation signal;

timing control means for controlling a reception timing so that a pilot symbol is contained in said reception signal stored in said first memory and controlling a timing for reading said first memory and said second memory;

an interpolation filter for re-sampling said cross-correlation signal at a frequency higher than a sampling frequency for said cross-correlation signal and outputting said re-sampled signal;

power calculation means for calculating power of said re-sampled cross-correlation signal;

averaging means for averaging said calculated power of cross-correlation signal over a plurality of cycles; and

peak detection means for detecting a peak of said averaged power of cross-correlation signal and determining a timing when said peak is detected as a reception timing.

**14.** A method of detecting a reception timing of a CDMA receiver for a mobile communication system using a direct spread code division multiple access method comprising the steps of:

obtaining a cross-correlation value between a reception signal and a known signal series periodically within a predetermined lag;

re-sampling said cross-correlation value at a frequency higher than a sampling frequency for said obtained cross-correlation value;

calculating power of said re-sampled cross-correlation value;

averaging said calculated power of cross-correlation value over a plurality of cycles; and

detecting a peak of said averaged power of cross-correlation value and determining a timing when said peak is detected as a reception timing.

**15.** The method of detecting a reception timing of a CDMA receiver of claim **14**, wherein said known signal series is obtained by spreading a known pilot symbol inserted to said reception signal at a predetermined period with a spread code.

**16.** The method of detecting a reception timing of a CDMA receiver of claim **14**, wherein said known signal series is obtained by re-spreading said signal series resulted from de-spreading said reception signal with a spread code.

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